(54) Title: SISO DECODER WITH SUB-BLOCK PROCESSING AND SUB-BLOCK BASED STOPPING CRITERION

(57) Abstract: The present invention relates to SISO decoder for iteratively decoding a block of received information symbols (r), in particular for use in a turbo decoder, said block being divided into a number of windows of information symbols. In order to achieve a significant reduction of power consumption a SISO decoder is proposed comprising at least one SISO decoding unit (17, 21) for SISO decoding of the received information symbols (r) of a window, wherein a stopping criterion is applied to each window. This allows to abort iterative decoding for each window individually once convergence of decoding is determined by marking a window or sub-block inactive (17,23). An inactive window is no longer SISO decoded in subsequent iterations.

JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY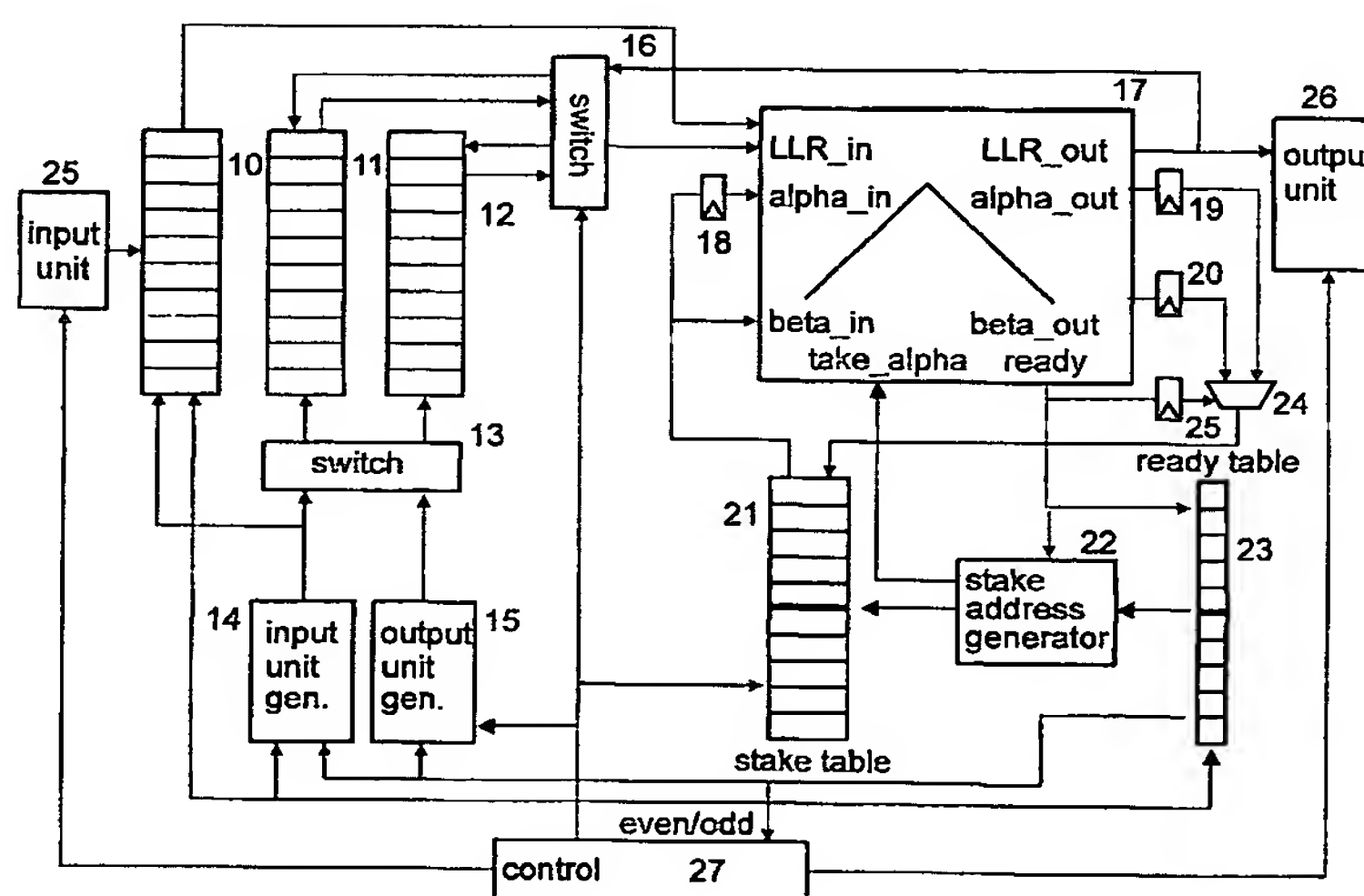, TJ, TM, TN, TR, TT, TZ, UA, UG, UZ, VC, VN, YU, ZA, ZM, ZW, ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG)

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